

I CLAIM AS MY INVENTION:

1. An anti-clog shaker system, comprising:

a shaker container;

a cap attached to the shaker container, said cap having a surface with a plurality of apertures through which particles which are to be contained within the container will pass when the shaker container is inverted and the shaker is shook;

an agitator comprising a shank having at least one protruding element which, when the agitator is rotated, will break up the particles to be contained in the shaker container;

a winder connected to the agitator through an aperture in the shaker cap; and

a wiper element connected to the agitator so that as the winder is rotated to rotate the mixer the wiper element also wipes away particles which may adhere in a region at the apertures of the shaker cap.

2. The system of claim 1 wherein the protruding element on the agitator comprises a screw-like thread at a periphery of the shank.

3. The system of claim 1 wherein the agitator has a flat planar tip.

4. The system of claim 1 wherein the wiper element comprises a wiper blade having a plurality of projecting dimples.

5. The system of claim 1 wherein the wiper element comprises a wiper blade having projections.

6. The system of claim 1 wherein the wiper element comprises a wiper blade and bent ears serving as mounting flanges mounted to a winder stud, the winder stud connecting the winder to the agitator.

7. The system according to claim 1 wherein the winder is connected to the agitator by a winder stud.

8. The system according to claim 7 wherein the winder stud comprises a central cylindrical portion with a threaded first attachment element at one end and a threaded second attachment element at an opposite end, the first and second threaded attachment elements being respectively received in a respective threaded hole of the winder and of the agitator.

9. The system of claim 8 wherein a washer is provided around the threaded first attachment element between the winder stud central cylindrical portion and a bottom of the cap.

10. The system of claim 8 wherein two washers are provided around the threaded first attachment element between an outer surface of the cap and an attachment end of the winder.

11. The system according to claim 1 wherein the winder comprises a rod bent at one end to form a handle.

12. The system according to claim 11 wherein the handle is bent into a triangular shape.

13. The system according to claim 1 wherein a winder stud connects the winder to the agitator, the winder stud connecting to said wiper element by mounting flanges, and a rivet holding the mounting flanges to the winder stud.

14. An anti-clog shaker system, comprising:

a shaker container;

an end surface at one end of the shaker container with a plurality of apertures through which particles which are to be contained within the container will pass when the shaker container is inverted and the shaker is shook;

an agitator which, when the agitator is rotated, will break up the particles to be contained in the shaker container;

a winder connected to the agitator through an aperture in the end surface; and

a wiper element connected to the agitator so that as the winder is rotated to rotate the agitator the wiper element also wipes away particles which may adhere in a region at the apertures of the shaker cap.

15. An anti-clog shaker mechanism for use with a shaker container having an end surface with a plurality of apertures, comprising:

an agitator which, when the agitator is rotated, will break up the particles to be provided in the shaker container;

a winder connected to the agitator through an aperture in the shaker container end surface; and

a wiper element connected to the agitator so that as the winder is rotated to rotate the agitator the wiper element also wipes away particles which may adhere in a region at the apertures of the shaker cap.

16. An anti-clog method for use with a shaker container having a cap, the cap having a plurality of apertures through which particles which are to be contained within the container will pass when the shaker container is inverted and shook, comprising the steps of:

providing an agitator in the container which, when rotated, will break up particles to be provided in the shaker container;

providing a winder to rotate the agitator;

providing a wiper element connected to the agitator so that as the winder is rotated to rotate the agitator the wiper element also wipes away particles which may adhere in a region at the apertures of the cap; and

rotating the winder to rotate the agitator and wiper element and inverting and shaking the shaker container to cause the particles to pass through said apertures.

17. The method according to claim 16 including the step of providing protrusions on the wiper element so that as the winder is rotated, the protrusions wipe away particles which may adhere in a vicinity of said apertures of said cap while the agitator is breaking up particles in the shaker container.

18. The method according to claim 16 including the step of providing at least one protruding element on the agitator for breaking up the particles as the agitator is rotated.

19. The method according to claim 18 including the step of providing said protruding element as a screw thread at a periphery of a shank so that as the agitator is rotated, the screw thread will break up the particles in the shaker container.